

OrthoArizona

Ankle Fracture Protocol

There are three basic types of ankle fractures:

1. Malleolar – either medial or lateral
2. Bimalleolar – both medial and lateral
3. Trimalleolar – includes posterior malleolus

The direction of the force determines the fracture pattern – external rotation, abduction, adduction. The goal of treatment is to maximize the long term function of the ankle by restoring and maintaining alignment. If surgery is not required: closed reduction then casting. If surgery required: ORIF and casting. The amount of weightbearing allowed is based on the quality of the fixation, quality of the bone and the healing status of the fracture. If the fixation is secure and stable, the expectation is for the patient to begin early AROM once the wounds are healed ~ two weeks status post. Edema control and scar massage are also implemented at this time. Weightbearing is usually allowed at 4-6 weeks status post and PROM at 6 weeks. Once the fracture is healed, progressive ROM and open and closed kinetic chain exercises are initiated.

Classification System

1. Weber/AO – categorizes fractures on level of the fibular fracture.
 - a. Type A – Fractures below the tibial plafond and typically transverse.
 - b. Type B – Fractures at level of tibial plafond and typically extend proximally in a spiral or short oblique fashion.
 - c. Type C – Fractures above the tibial plafond and associated with syndesmotic injuries.
2. Lauge-Hansen – categorizes fractures on position of foot at time of injury.
 - a. Supination-Adduction (Stage I & II)
 - b. Supination-External Rotation (Stage I,II,III,IV)
 - c. Pronation-Abduction (Stage I,II,III)
 - d. Pronation-External Rotation (Stage I,II,III,IV)

General Rehabilitation Guideline

*Communicate with physicians as to severity of the fracture, quality of fixation and bone quality.

*Post-op: patient casted for ~2 weeks then placed in a boot.

*NWB until allowed by physician.

2 weeks post (if fixation secure/stable)

AROM

Edema Control

Scar massage (once sutures removed)

4 – 6 weeks

Weightbearing as determined by physician – Gait training

Continue with edema control strategies as necessary.

AROM to tolerance

Initiate AAROM

Soft tissue mobilization

Midfoot joint mobilizations

Stationary bike

6 – 8 weeks (fracture healed)

Wean out of boot – fit with air cast or ASO

Increase weightbearing to full

Ankle isometrics progressing to open chain isotonic

Closed chain exercise including weight machines, weight shifts, seated BAPS

Proprioception exercise including SLB, diagonal doming and foot intrinsic strengthening

Joint mobilizations to increase talocrural and subtalar ROM

8 – 10 weeks

Progress closed chain exercises – Sportcord, lunges, heel raises etc

Dynamic balance progression – mini tramp, SLB on uneven surfaces

Advanced proprioception exercises

Continue to advance weight machine exercises, stretching, ROM and joint mobilizations

12 – 14 weeks

Progress walk/jogging program

Fit for orthotics if needed

Progress previous strengthening, stretching and proprioception exercises

Sport and agility drills/tests